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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,228	10/28/2005	David W Morris	PP23370.0003/20366-036US1	4557
55255 7590 01/11/2008 Novartis Vaccines and Diagnostics, Inc. Corporate Intellectual Property P.O. BOX 8097 EMERYVILLE, CA 94662-8097			EXAMINER HARRIS, ALANA M	
			ART UNIT 1643	PAPER NUMBER
			MAIL DATE 01/11/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/539,228	<b>Applicant(s)</b> MORRIS ET AL.	
	<b>Examiner</b> Alana M. Harris, Ph.D.	<b>Art Unit</b> 1643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-77 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-77 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                               | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                      | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

***Election/Restrictions***

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-7, 9-12, 27 and 28, drawn to an isolated nucleic acid and a kit comprising said nucleic acid. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group II, claim(s) 8, drawn to an antisense fragment corresponding to the sequences of claim 1. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group III, claim(s) 13-15, drawn to a microarray for detecting a cancer associated (CA) nucleic acid comprising a nucleic acid sequence. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group IV, claim(s) 16-20, drawn to a polypeptide encoded by one of the polynucleotides of claim 1. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group V, claim(s) 21-26 and 59-74, drawn to an antibody that binds to a polypeptide and the hybridoma that produces the distinct antibody and a pharmaceutical composition comprising individual antibody. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group VI, claim(s) 29 and 30, drawn to an electronic library comprising a polynucleotide. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group VII, claim(s) 31, drawn to an electronic library comprising a polypeptide. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group VIII, claim(s) 32-35, drawn to a method for screening for anticancer activity in a potential drug comprising providing a cell that expresses a CA gene, wherein the said

drug is an inhibitor of transcription. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group IX, claim(s) 32-34 and 36, drawn to a method for screening for anticancer activity in a potential drug comprising providing a cell that expresses a CA gene, wherein the said drug is a G-protein coupled receptor antagonist. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group X, claim(s) 32-34 and 37, drawn to a method for screening for anticancer activity in a potential drug comprising providing a cell that expresses a CA gene, wherein the said drug is a growth factor antagonist. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group XI, claim(s) 32-34 and 38, drawn to a method for screening for anticancer activity in a potential drug comprising providing a cell that expresses a CA gene, wherein the said drug is a serine-threonine kinase antagonist. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group XII, claim(s) 32-34 and 39, drawn to a method for screening for anticancer activity in a potential drug comprising providing a cell that expresses a CA gene, wherein the said drug is a tyrosine kinase antagonist. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group XIII, claim(s) 40, drawn to a method for detecting cancer associated with expression of a polypeptide in a test sample comprising detecting a level of expression of at least one polypeptide. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group XIV, claim(s) 41, drawn to a method for detecting cancer associated with expression of polypeptide in a test sample comprising detecting a level of activity of at least one polypeptide. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group XV, claim(s) 42 and 75, drawn to a method for detecting cancer comprising detecting a level of an antibody against an antigenic polypeptide. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group XVI, claim(s) 43-46, drawn to a method for screening for a bioactive agent capable of modulating the activity of CA protein, wherein the bioactive agent is an inhibitor of transcription. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group XVII, claim(s) 43-45 and 47, drawn to a method for screening for a bioactive agent capable of modulating the activity of CA protein, wherein the bioactive agent is a G-protein coupled receptor antagonist. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group XVIII, claim(s) 43-45 and 48, drawn to a method for screening for a bioactive agent capable of modulating the activity of CA protein, wherein the bioactive agent is a growth factor antagonist. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group XIX, claim(s) 43-45 and 49, drawn to a method for screening for a bioactive agent capable of modulating the activity of CA protein, wherein the bioactive agent is a serine-threonine kinase antagonist. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group XX, claim(s) 43-45 and 50, drawn to a method for screening for a bioactive agent capable of modulating the activity of CA protein, wherein the bioactive agent is a tyrosine kinase antagonist. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group XXI, claim(s) 51, drawn to a method of diagnosing cancer comprising determining the expression of one or more genes comprising a nucleic acid sequence.

Group XXII, claim(s) 52, 53 and 54, drawn to a method for treating cancer comprising administering to a patient an inhibitor of a CA protein encoded by a nucleic acid, wherein the inhibitor of transcription. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group XXIII, claim(s) 52, 53 and 55, drawn to a method for treating cancer comprising administering to a patient an inhibitor of a CA protein encoded by a nucleic acid, wherein the inhibitor is a G-protein coupled receptor antagonist. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group XXIV, claim(s) 52, 53 and 56, drawn to a method for treating cancer comprising administering to a patient an inhibitor of a CA protein encoded by a nucleic acid, wherein the inhibitor is a growth factor antagonist. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group XXV, claim(s) 52, 53 and 57, drawn to a method for treating cancer comprising administering to a patient an inhibitor of a CA protein encoded by a nucleic acid, wherein the inhibitor is a serine-threonine kinase antagonist. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group XXVI, claim(s) 52, 53 and 58, drawn to a method for treating cancer comprising administering to a patient an inhibitor of a CA protein encoded by a nucleic acid, wherein the inhibitor is a tyrosine kinase antagonist. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

Group XXVII, claim(s) 76 and 77, drawn to a method for inhibiting growth of cancer cells comprising administering a pharmaceutical composition containing an antibody. Election of this Group requires the further election of a single SEQ ID NO: for reason described below.

2. The inventions listed as Groups I-XXVII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature recited in claim 1 is an isolated nucleic acid comprising at least 10 contiguous nucleotides of a sequence, SEQ ID NO: 1. Harris et al. (Molecular and Cellular Neuroscience 16: 578-596, 2000) teaches nucleic acid comprising at least 10 contiguous nucleotides, see sequence alignment below and page 587. Therefore, the technical feature recited in claim 1 is not special. Accordingly, the groups are not so linked as to form a single general concept under PCT Rule 13.1.

>HPRD\_08442\_1|HPRD\_08442|NM\_015239.1|ATP/GTP binding protein 1  
Length = 4220

Score = 28.2 bits (14), Expect = 1.4  
Identities = 14/14 (100%)  
Strand = Plus / Minus

Query: 5 atagtaacaaatgt 18  
|||  
Sbjct: 2389 atagtaacaaatgt 2376

3. With the election of any of Groups I-XXVIII, the further election of one of the polynucleotide sequences hR07-001 through hR07-128 is required. Each of the polynucleotides is structurally and functionally different product, each encoding a structurally and functionally different product, which are recognized by unique and different antibodies. The examination of all SEQ ID NO.s would require different searches in the U.S. Patent Shoes and the scientific literature. Moreover, if the election of one the Groups requires a polypeptide or an antibody Applicants' are required to elect the polynucleotide encoding the polypeptide or the polynucleotide encoding the polypeptide that binds to the elected antibody.

4. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions

unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Alana M. Harris, Ph.D. whose telephone number is (571)272-0831. The Examiner works a flexible schedule, however she can normally be reached between the hours of 7:30 am to 6:30 pm, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry R. Helms, Ph.D. can be reached on (571) 272-0832. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

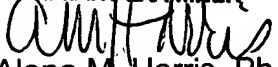
Application/Control Number:  
10/539,228  
Art Unit: 1643

Page 8

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALANA M. HARRIS, PH.D.

PRIMARY EXAMINER

  
Alana M. Harris, Ph.D.  
04 January 2008